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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,496	12/30/2004	Yuzo Yoneyama	Y0647.0150	5396
32172 7590 05/15/2007 DICKSTEIN SHAPIRO LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) NEW YORK, NY 10036-2714			EXAMINER WEST, JEFFREY R	
			ART UNIT 2857	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,496	<b>Applicant(s)</b> YONEYAMA, YUZO	
	<b>Examiner</b> Jeffrey R. West	<b>Art Unit</b> 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/02/06</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11 and 14-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 14 is rejected as failing to comply with the written description requirement because it recites:

A method for detecting a failure in a transmitter or a receiver, the method comprising: obtaining a reception power of a first signal transmitted by a base station to at least one communication terminal and a transmission power of a second signal transmitted by a base station to at least one communication terminal; determining a transmission power of the first signal and a reception power of the second signal; calculating an upstream propagation loss from the communication terminal to the base station and a downstream propagation loss from the base station to the communication terminal as a function of the transmission and reception powers of the first and second signals...

The specification, however, on page 13, lines 2-10, discloses:

In this example, the failure detecting part 218 can calculate the transmission losses of the transmission paths 204<sub>1</sub> to 204<sub>N</sub> between the base station 202 and mobile stations 203<sub>1</sub> to 203<sub>N</sub> by using the above measurement results by

Upstream signal propagation loss  $L_{xu}$

$= P_{tm_x} - P_{rb_x}$

Downstream signal propagation loss  $L_{xd}$

$$= P_{t,b_x} - P_{t,m_x}$$

This section of the specification describes determining the upstream and downstream propagation losses based on a reception power of a first signal transmitted by a base station to at least one communication terminal and a transmission power of a second signal transmitted by a communication terminal to the base station and not, as claimed, a reception power of a first signal transmitted by a base station to at least one communication terminal and a transmission power of a second signal transmitted by a base station to at least one communication terminal.

Claims 11 and 16 are further rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement because they require the determination of reception and transmission power on the basis of "at least one notification message", while the specification does not suitably describe to one having ordinary skill in the art, such message communication.

Claim 15 is rejected under 35 U.S.C. 112, first paragraph, because it incorporates the lack of written description present in parent claim 14.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2857

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4, 7, 9, 10, 14, and 15, as may best be understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,542,097 to Ward et al.

With respect to claim 1, Ward discloses a failure detecting device characterized by comprising notification receiving means for receiving, from at least one communication terminal of a communication partner (column 9, lines 28-40 and Figure 6), and outputting notification of both a reception power of a first signal transmitted from a main apparatus to said communication terminal (column 6, lines 61-62) and a transmission power of a second signal transmitted from said communication terminal to said main apparatus (column 6, line 66), determining means for determining and outputting a reception power of said second signal transmitted from said communication terminal to said main apparatus (column 6, lines 57-58) and a transmission power of said first signal transmitted from said main apparatus to said communication terminal (column 6, line 56), propagation loss calculating means for calculating bidirectional propagation losses between said communication terminal and said main apparatus, from said reception and transmission powers of said first signal and from said reception and transmission powers of said second signal (column 7, lines 16-38), difference checking means for checking whether a difference between the bidirectional propagation losses falls within a predetermined allowable range (column 8, lines 34-48); and failure

determining means for determining that a transmitter or a receiver of at least one of said communication terminal and said main apparatus has a failure, if said difference checking means determines that the difference falls outside the predetermined allowable range (column 9, lines 1-27) and for identifying said transmitter or receiver that has a failure based on whether the difference falls outside the allowable range, and whether a propagation loss of the propagation path to said main apparatus is smaller than a propagation loss of a propagation path to each said communication terminal (i.e. a failure is determined if the propagation loss to the main apparatus is smaller than a propagation loss to either communication terminal when such a smaller propagation loss to the main apparatus would cause an inequality in equation 9) (column 9, lines 1-27).

With respect to claim 2, Ward discloses further comprising a plurality of communication terminals, communicatively coupled to the base station via respective communication paths (column 6, lines 57-67), wherein, for each of said plurality of communication terminals, said notification receiving means receives (column 6, lines 57-67), notification of both a reception power of a first respective signal transmitted from said main apparatus (column 6, lines 61-62) and a transmission power of a second respective signal transmitted to said main apparatus (column 6, line 66), said determining means determines, for each communication terminal, the reception power of the second respective signal (column 6, lines 57-60) and the transmission power of the first respective signal (column 6, line 56), said propagation loss calculating means calculates, for each communication terminal, a

respective bidirectional propagation loss between each respective communication terminal and said main apparatus, from said notification of both the reception power of the first respective signal transmitted from said main apparatus and the transmission power of the second respective signal transmitted to said main apparatus from the respective communication terminal (column 7, lines 16-38), said difference checking means checks, for each communication terminal, whether a difference between the respective bidirectional propagation losses falls within a predetermined allowable range (column 8, lines 34-48), and said failure determining means determines that a transmitter or receiver of at least one of said communication terminals and main apparatus has a failure, if said difference checking means determines that the difference between the respective bidirectional propagation losses for at least one communication terminals falls outside the predetermined allowable range (column 9, lines 1-27).

With respect to claim 4, Ward discloses that if said difference checking means determines that the difference falls outside the predetermined allowable range for at least one of said plurality of communication terminals, said failure determining means determines that a transmitter or receiver of each of said communication terminals, which is found to fall outside the predetermined allowable range has a failure (column 6, lines 57-67 and column 9, lines 1-27).

With respect to claim 7, Ward discloses that if it is determined that a propagation loss of a propagation path to said main apparatus is equal to a propagation loss of a propagation path to each of said at least one communication terminal, said failure

determining means determines that said communication terminal and main apparatus are normal (column 9, lines 1-27).

With respect to claim 9, Ward discloses an apparatus for detecting a failure in a transmitter or a receiver, the apparatus comprising: a notification receiver (column 9, lines 28-40 and Figure 6) configured to determine a reception power of a first signal transmitted by a base station to at least one communication terminal (column 6, lines 61-62) and configured to determine a transmission power of a second signal transmitted by the communication terminal to the base station (column 6, line 66); a determination device configured to determine a transmission power of the first signal (column 6, line 56) and a reception power of the second signal (column 6, lines 57-58); a propagation loss calculator configured to calculate an upstream propagation loss from the communication terminal to the base station and a downstream propagation loss from the base station to the communication terminal as a function of the transmission and reception powers of the first and second signals (column 7, lines 16-38); and a failure determination unit configured to indicate a failure in the transmitter or the receiver if a difference between the upstream and downstream propagation losses exceeds a threshold value (i.e. a failure is determined if the propagation loss to the main apparatus is smaller than a propagation loss to either communication terminal when such a smaller propagation loss to the main apparatus would cause an inequality in equation 9) (column 9, lines 1-27).

With respect to claim 10, Ward discloses that the propagation loss calculator calculates the downstream propagation loss as a function of the transmission and



reception powers of the first signal and calculates the upstream propagation loss as a function of the transmission and reception powers of the second signal (column 7, lines 16-38).

With respect to claim 14, Ward discloses a method for detecting a failure in a transmitter or a receiver, the method comprising: obtaining a reception power of a first signal transmitted by a base station to at least one communication terminal (column 6, lines 61-62) and a transmission power of a second signal transmitted by a communication terminal to the base station (column 6, line 66); determining a transmission power of the first signal (column 6, line 56) and a reception power of the second signal (column 6, lines 57-58); calculating an upstream propagation loss from the communication terminal to the base station and a downstream propagation loss from the base station to the communication terminal as a function of the transmission and reception powers of the first and second signals (column 7, lines 16-38); and detecting a failure in the transmitter or the receiver if a difference between the upstream and downstream propagation losses exceeds a threshold value (i.e. a failure is determined if the propagation loss to the main apparatus is smaller than a propagation loss to either communication terminal when such a smaller propagation loss to the main apparatus would cause an inequality in equation 9) (column 9, lines 1-27).

With respect to claim 15, Ward discloses that the calculating step includes calculating the downstream propagation loss as a function of the transmission and reception powers of the first signal and calculating the upstream propagation loss as

a function of the transmission and reception powers of the second signal (column 7, lines 16-38).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of U.S. Patent Application Publication No. 2002/0058493 to Ikeda et al.

As noted above, the invention of Ward teaches many of the features of the claimed invention and while Ward does teach a difference checking means that determines whether there is a failure in the communication terminals when the difference falls outside the allowable range, Ward does not explicitly indicate that when the difference falls outside the allowable range for all of the communication terminals, a determination is made that a transmitter or receiver of the main apparatus has a failure.

Ikeda teaches a retransmission control method and apparatus comprising a plurality of receivers that receive a signal transmitted from a main apparatus (0010, lines 1-2) and the plurality of receivers determine if the signal was received correctly or in error (0047, lines 1-4) wherein if all of the plurality of receivers receive the signal in error, it is the signal transmitted from the main apparatus (i.e. a failure in

the main apparatus transmitter) that is has caused the error and the not plurality of receivers (0064, lines 5-11).

It would have been obvious to one having ordinary skill in the art to explicitly indicate that when the difference falls outside the allowable range for all of the communication terminals, a determination is made that a transmitter or receiver of the main apparatus has a failure, as taught by Ikeda, because, as suggested by Ikeda, and as one having ordinary skill in the art would recognize, when all of a plurality of receivers receive a signal in error, there is a high probability that it is the signal sent that contains an error as opposed to each of the receivers having error (0052, lines 1-13 and 0064, lines 5-11), therefore the combination would have improved the fault diagnosis of Ward by logically determining when the signal is in error from a faulty main apparatus and not from the communication terminals themselves.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of U.S. Patent Application Publication No. 2002/0064131 to Boesinger et al.

As noted above, the invention of Ward teaches many of the features of the claimed invention and while the invention of Ward does teach that when the difference falls outside the allowable range for at least one of the communication terminals, a determination is made that a transmitter or receiver of the communication terminal has a failure, Ward does not provide means for

discriminating between a transmitter and receiver failure of the communication terminal.

Boesinger teaches a method for operating a data network wherein a fault is determined based on an increase in attenuation/propagation loss due to the failure/aging of either the transmitter or receiver that causes the increase in attenuation/propagation loss (0006).

It would have been obvious to one having ordinary skill in the art to modify the invention of Ward to provide means for discriminating between a transmitter and receiver failure of the communication terminal, as taught by Boesinger, because as is well-known by one having ordinary skill in the art, and suggested by Boesinger, the device that causes an increase in attenuation is the device undergoing a fault and therefore, by determining whether it is the transmitter or receiver undergoing the fault, the combination would have improved the failure analysis by increasing the efficiency of fault detection by distinctly determining which device is failing (0006).

Further, since the invention of Ward teaches determining that it is the communication terminal that has a failure and Boesinger teaches that an increase in attenuation/propagation loss is caused by a failure of either the transmitter or receiver, one having ordinary skill in the art would recognize that if the propagation path to the main apparatus is smaller than a propagation loss of a propagation path to each communication terminal, that the transmitter of the communication terminal is causing a smaller propagation loss than the receiver. Therefore, in light of the teachings of Boesinger, since the receiver of the communication terminal is causing

the larger propagation loss, the receiver of the communication terminal has failed.

Similarly, in a case in which the receiver of the communication terminal is not causing the larger propagation loss, the transmitter of the communication terminal has failed.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of JP Patent Application Publication No. 63-200626 to Iwasaki et al.

As noted above, the invention of Ward teaches many of the features of the claimed invention and while Ward does teach a difference checking means that determines whether there is a failure in the communication terminals when the difference falls outside the allowable range, Ward does not explicitly include a failure notifying means for notifying said communication terminal of a detected failure.

Iwasaki teaches an inductive communication system including a base station that determines when a propagation loss between a mobile station and the base station reaches a prescribed value and, using a corresponding means, notifies the base station of such propagation loss failure (abstract).

It would have been obvious to one having ordinary skill in the art to modify the invention of Ward to explicitly include a failure notifying means for notifying said communication terminal of a detected failure, as taught by Iwasaki, because, as suggested by Iwasaki, the combination would have improved the operation of Ward by preventing operation of the communication terminal with excessive propagation

loss due to failed transmission by raising an alarm when the propagation loss reaches a prescribed value (Abstract).

9. Claims 5, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of Ikeda and further in view of U.S. Patent Application Publication No. 2002/0064131 to Boesinger et al.

As noted above, the invention of Ward and Ikeda teaches many of the features of the claimed invention and while the invention of Ward and Ikeda does teach that when the difference falls outside the allowable range for all of the communication terminals, a determination is made that a transmitter or receiver of the main apparatus has a failure, the combination does not provide means for discriminating between a transmitter and receiver failure of the main apparatus.

Further, while the invention of Ward and Ikeda does teach that when the difference falls outside the allowable range for at least one of the communication terminals, a determination is made that a transmitter or receiver of the communication terminal has a failure, the combination does not provide means for discriminating between a transmitter and receiver failure of the communication terminal.

Boesinger teaches a method for operating a data network wherein a fault is determined based on an increase in attenuation/propagation loss due to the failure/aging of either the transmitter or receiver that causes the increase in attenuation/propagation loss (0006).

It would have been obvious to one having ordinary skill in the art to modify the invention of Ward and Ikeda to provide means for discriminating between a transmitter and receiver failure of the main apparatus, as taught by Boesinger, because as is well-known by one having ordinary skill in the art, and suggested by Boesinger, the device that causes an increase in attenuation is the device undergoing a fault and therefore, by determining whether it is the transmitter or receiver undergoing the fault, the combination would have improved the failure analysis by increasing the efficiency of fault detection by distinctly determining which device is failing (0006).

Further, since the invention of Ward and Ikeda teaches determining that it is the main apparatus that has a failure and Boesinger teaches that an increase in attenuation/propagation loss is caused by a failure of either the transmitter or receiver, one having ordinary skill in the art would recognize that if the propagation path to the main apparatus is smaller than a propagation loss of a propagation path to each communication terminal, that the receiver of the main apparatus is causing a smaller propagation loss than the transmitter. Therefore, in light of the teachings of Boesinger, since the transmitter of the main apparatus is causing the larger propagation loss, the transmitter of the main apparatus has failed. Similarly, in a case in which the transmitter of the main apparatus is not causing the larger propagation loss, the receiver of the main apparatus has failed.

It would have been obvious to one having ordinary skill in the art to modify the invention of Ward and Ikeda to provide means for discriminating between a

transmitter and receiver failure of the communication terminal, as taught by Boesinger, because as is well-known by one having ordinary skill in the art, and suggested by Boesinger, the device that causes an increase in attenuation is the device undergoing a fault and therefore, by determining whether it is the transmitter or receiver undergoing the fault, the combination would have improved the failure analysis by increasing the efficiency of fault detection by distinctly determining which device is failing (0006).

Further, since the invention of Ward and Ikeda teaches determining that it is the communication terminal that has a failure and Boesinger teaches that an increase in attenuation/propagation loss is caused by a failure of either the transmitter or receiver, one having ordinary skill in the art would recognize that if the propagation path to the main apparatus is smaller than a propagation loss of a propagation path to each communication terminal, that the transmitter of the communication terminal is causing a smaller propagation loss than the receiver. Therefore, in light of the teachings of Boesinger, since the receiver of the communication terminal is causing the larger propagation loss, the receiver of the communication terminal has failed. Similarly, in a case in which the receiver of the communication terminal is not causing the larger propagation loss, the transmitter of the communication terminal has failed.

10. Claims 11 and 16, as may best be understood, are rejected under 35 U.S.C.



103(a) as being unpatentable over Ward in view of U.S. Patent No. 6,411,818 to O'Reilly.

As noted above, the invention of Ward teaches many of the features of the claimed invention and while the Ward does teach a notification receiver determining a reception power of the first signal and a transmission power of the second signal, Ward does not explicitly indicate that such a determination is based on at least one notification message transmitted by the communication terminal to the base station.

O'Reilly teaches a method for assessing path imbalance in mobile communication networks comprising a base station and at least one communication terminal in transmission/reception communication (column 2, lines 38-67) wherein a receiver determines a reception power of signal transmitted by a base station and a transmission power of a signal transmitted by the at least one communication terminal based on at least one notification message transmitted by the communication terminal to the base station (column 1, line 56 to column 2, line 5).

It would have been obvious to one having ordinary skill in the art to modify the invention of Ward to explicitly indicate that such a determination is based on at least one notification message transmitted by the communication terminal to the base station, as taught by O'Reilly, because O'Reilly suggests that the combination would have provided a suitable method for communicating the power levels of Ward while allowing the reception power of the first signal to be based on the power actually received by the communication terminal (column 1, line 56 to column 2, line 5).

***Response to Arguments***

11. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

The following arguments, however, are noted:

Applicant argues:

Initially, Applicant notes that equation 5 at column eight and equation 9 at column nine are discussed with respect to two separate and distinct embodiments of Ward and, as such, are not properly read together in the manner suggested by the Office Action. Regardless, it is understood that Ward discloses only two possible causes for the pathloss difference (i.e., error): (1) measurement errors; or (2) "cochannel radio energy or other disturbances" if equation 9 is to be used to infer the error, as suggested by the Office Action. (Ward; col. 8, lines 39-41; col. 9, lines 15-17). There is absolutely nothing in Ward which teaches that the difference (i.e., error) in bidirectional pathloss is caused by a transmitter or receiver failure and, therefore, nothing in Ward which discloses a determining means which determines that "a transmitter or receiver... has a failure if said difference checking means determines that the difference falls outside the predetermined allowable range" and which identifies "said transmitter or receiver" having the failure, as recited in claim 1. Indeed, the fact that Ward suggests other causes for the pathloss difference/error teaches away from Applicant's invention entirely.

The Examiner maintains that Ward discloses a failure determining means for determining that a transmitter or a receiver of at least one of said communication terminal and said main apparatus has a failure, if said difference checking means determines that the difference falls outside the predetermined allowable range (column 9, lines 1-27) and for identifying said transmitter or receiver that has a failure based on whether the difference falls outside the allowable range, and whether a propagation loss of the propagation path to said main apparatus is smaller than a propagation loss of a propagation path to each said communication terminal (i.e. a failure is determined if the propagation loss to the main apparatus is smaller

than a propagation loss to either communication terminal when such a smaller propagation loss to the main apparatus would cause an inequality in equation 9) (column 9, lines 1-27), specifically:

According to another exemplary embodiment of the present invention an alternative exemplary formula for pathloss comparison is as follows.

$$Ld1-Lu1=Ld2-Lu2 \text{ (9)}$$

which indicates that, assuming no errors in the base stations, the difference between downlink and uplink pathloss should be the same for the path between the mobile station and the serving base station on one side and the mobile station and the target base station on the other side, because the inaccuracies in the mobile station both regarding measuring equipment and transmission levels are the same on both sides of the equation.

If equation (9) is not satisfied the reason is that the signals considered include cochannel radio energy or other disturbances and that the planned handoff should be disallowed. A certain inequality should be allowed in equation (9) for the errors caused by the serving and target base stations, but this inequality can be relatively small, e.g., 2 dB, and acts as a predefined threshold. This threshold may be different depending on which target cell is under consideration or even which particular target and the serving cells are being considered. The threshold may also vary with time depending on the variance of associated signals. The threshold is still predefined in the sense that at the time of the consistency check it is known.

The Examiner also asserts that Ward discloses such error determination indicating a failure (i.e. unacceptable amount of transmission level inaccuracies and measurement errors attributable to the equipment) of a transmitter or receiver in column 6, lines 13-25, specifically:

FIG. 4, on the other hand, illustrates that deviations (e.g., total bias error) from the theoretical value of zero are due to transmission level inaccuracies and measurement errors attributable to the equipment. In the base stations the accuracy of power setting and measuring equipment is generally better than the accuracy of similar equipment in mobile stations. Assuming that any errors are caused only by the mobiles, the total bias error shown in FIG. 4 may be

calculated from the sending levels and the measurements in the serving base station itself and in the mobile station. This calculated total bias error may then be used to provide a correction in the consistency check as will be discussed below.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to

Applicant's disclosure:

U.S. Patent No. 6,278,879 to Western et al. teaches a method for determining a transmit power of a base station in a cellular communication system.

U.S. Patent Application Publication No. 2002/0016177 to Miya et al. teaches a transmission power control apparatus and radio communication apparatus.

U.S. Patent No. 5,487,176 to Yoneyama teaches a reception amplifier failure detection device and method for radio transceiver apparatus.

U.S. Patent No. 4,807,224 to Naron et al. teaches a multicast data distribution system and method.

U.S. Patent No. 6,400,953 to Furukawa teaches a CDMA type mobile radio communication system capable of realizing an effective system operation without excess and deficiency of radio base station simultaneously connected.

U.S. Patent No. 6,405,021 to Hamabe teaches a method of controlling transmission power in cellular system and base station apparatus.

JP Patent Application Publication No. 10-276127 to Seki teaches radio base station equipment with fault detection function and mobile communication system using the same.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

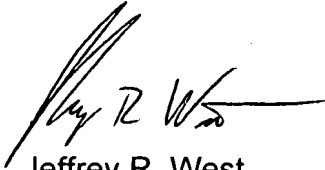
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (571)272-2226. The examiner can normally be reached on Monday through Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2857

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Jeff R West', with a long horizontal stroke extending to the right.

Jeffrey R. West  
Primary Examiner  
Art Unit - 2857

May 13, 2007